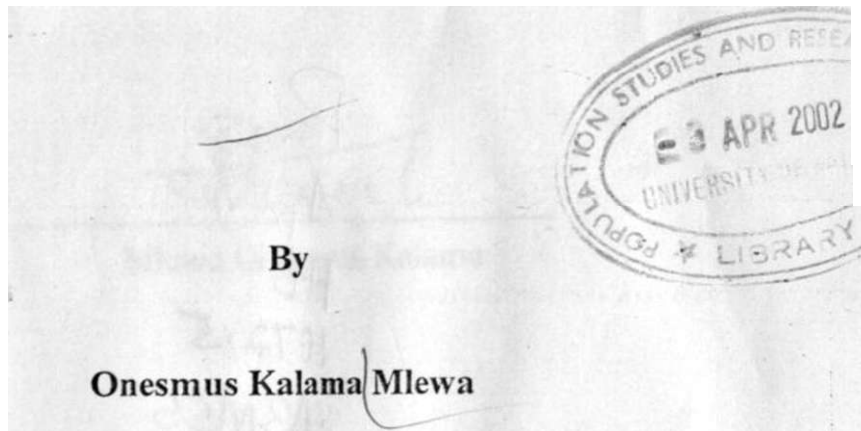


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FERTILITY PREFERENCE AMONG MEN IN KENYA



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A project submitted in partial fulfillment for the degree of Master of Arts in

Population Studies and Research at the university of Nairobi

2001

DECLARATION

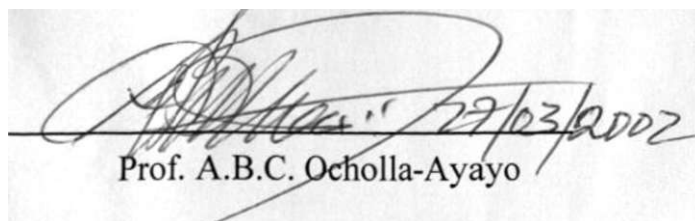
This project is my original work and has not been presented for a degree in any other university

A handwritten signature in black ink, appearing to read 'Mlewa Onesmus Kalama', written over a horizontal line.

Mlewa Onesmus Kalama

This project has been submitted for examination with our approval as university supervisors

Prof. S. Khasiani

A handwritten signature in black ink, appearing to read 'Prof. A.B.C. Ocholla-Ayayo', written over a horizontal line. To the right of the signature, the date '29/03/2007' is written.

Prof. A.B.C. Ocholla-Ayayo

DEDICATION

To my family: my mother Serrah Mlewa and my father Mlewa Kalama. My brothers:
Nickson, the late Francis, Anderson and Eric.

,/

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My first gratitude goes to the Nairobi University for granting me a scholarship, which enabled me to pursue this course at the PSRI. Let the University continue with the same spirit so that many can also benefit.

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ABSTRACT

This study aims to investigate the socio-economic, socio-cultural and demographic factors that influence family size preference among men in Kenya. This study is basically concerned with the investigation of how selected socio-economic, cultural and demographic variables are independent predictors of desired family size. The study further aims to provide a set of recommendations for both policy makers and for further research into related issues.

The data used is secondary data based on the K.DHS of 1998 which was a national survey hence provide a better approximation of fertility preferences countrywide.

The study utilized both bivariate and multivariate techniques in its quest to determine the significant predictors of fertility preference.

Results of the bivariate analysis using cross tabulations and applying the chi-square test found out that level of education, place of residence, region of residence, type of marriage, ethnicity, Religion and current age to be significantly related to desired family size at the 5 per cent level of significance. Occupation was however found not to be significant at the 5 per cent significance level.

On applying the Multiple regression, the analysis it was found that the selected variables accounted for 28.8 per cent of the total variation in desired family size among currently married men interviewed. The t-test for the individual coefficients (*t*s) showed that, among the 8 selected variables, education, place of residence, ethnicity, region of

residence, type of and marriage were the strong predictors affecting desired family size significantly.

All the hypothesises were confirmed, socio-cultural factors and socio-economic factors had strong effects on desired family while demographic factors did not have a very strong effect on desired family size. The reason why socio-cultural factors had strong effects on desired family size might be explained by the tendency of Kenyan men to carry on with their cultural practices even with the current wave of modernization.

This study recommends that relevant policy be put in place that aim at encouraging adaptive behavior where some traditional patterns of life are conserved

CHAPTER ONE: MEN AND FERTILITY IN KENYA

1.0.0 General introduction

During the past three decades, majority of Sub-Saharan African countries have experienced rapid population growth and increasing youthfulness of the population. Alternative lifestyles that typically accompany social and economic change may alter the traditional African family as some sociologists have predicted that the nuclear family will eventually be adopted (See Goode, 1963; Caldwell, 1982). Other scholars have argued that the traditional African family is balancing customary lifestyles with western ones and may not converge to the nuclear family model (Lcsthaenghe, 1989).

In Kenya like in many other sub-Saharan African countries, the family is the primary economic organ. It is both a unit of production and consumption. The family is the basic social order in the society, the unit in which traditional norms and values, beliefs and knowledge, and practical skills are first imparted to the young members of the society for their future survival (Ocholla-Ayayo. 2001). The family is treated as a multifunctional unit. As a social institution, it procreates, socializes and educates the children (Adepoju A.. 1992; Wariara. 1992; Ocholla-Ayayo 1988a).

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In Kenya the family is treated as a self-sufficient economic unit. It provides almost all the factors of production including labor, land and capital (Ocholla-Ayayo, 1990). The family is the basic economic unit, which maintains production, distribution and

consumption of the survival chances of the infants and children, old and adults (Ocholla-Ayayo 2001). Kenya is still basically a subsistence economy and in such a subsistence economy, the main and crucial factor of production is labor, which is traditionally recruited mainly from within the family unit. The family is also the socio-biological unit that ensures orderly reproductive continuity of the human race. In order to perform its various roles of production effectively, the family size is usually tailored to those needs of the society.

Although Kenya is a multicultural state-like in many other sub-Saharan African countries- women's roles are basically those of procreation and care of the home. This leaves the men to be the sole decision-makers as regards family issues. An example is the continued prevalence of polygamous unions in a majority of the communities in Kenya. This owes its existence to the levirate system; to the likelihood of taking a second wife after the failure of the first wife to bear a male child and to the cultural importance attached to the institution (Ocholla-Ayayo, 1990; Ngondo, 1992).

From an economic perspective, moreover, wives in Kenya especially in the rural areas are looked as viable economic assets to their husbands, as are their children. This becomes apparent as one critically examines not only women's reproductive roles but their productive roles as well. This situation is aggravated by the high dependency ratio m existence among the Kenya communities (Ocholla-Ayayo, 2001). This state is becoming worse with the government retrenchment and cost sharing policies.

While it is agreeable that there is a rapid change throughout all developing countries as people are shifting from rural to urban areas (Oppong, 1988; Makinawa, 1988), these demographic changes in Kenya are occurring within a context of economic stagnation and recurrent crises. The African family is experiencing stresses and strains, shortages and difficulties with all practical problems of social change (Ocholla-Ayayo, 2001). Women in most Kenyan families are still subordinate to their husbands both socially and economically. This places the most important role of decision-making regarding family matters on the man. The economic hardships have tended to structure the employment system in such a way that men predominate in plantation agriculture, industry, commerce and transportation confining women to lower rungs of formal employment (Mbugua, 1992). This further emphasizes male predominance over women on decision-making. The general male predominance over women on decision making in Kenya can be well understood if an examination of both Kenya's socio-economic, socio-cultural and demographic characteristics are looked into.

Background information

Since gaining independence in 1963, Kenya has been in a constant state of flux as the momentum of development is rapidly changing traditional ways of life with modern ones. This brings with it new concerns and issues that the country must face. With one of the highest population growth rates in the world, the norm of a small family size needs to be cultivated with proper family planning practices.

\ main aspect of this is a better understanding of the concept of fertility preference among men in Kenya, and this requires knowledge of some basic facts about the culture and the people of Kenya in general.

Geographic set up

Geographically the republic of Kenya lies astride the equator and is bordered by the Tanzania, Uganda. The Sudan, Ethiopia and Somalia with the Indian Ocean to the east.

The entire republic measures 583,000 square kilometers. The republic can be divided into four major ecological regions: first there is the general flat southeast coastal plains usually dry and hot. Secondly there are the northeast coastal and inland plains with less than 50mm annual rainfall. There is then the northwest scrubland that in many ways is similar to the north east block. Finally we have the plateau in the southwest, which is the most fertile part of the country (Horelli, H.T et al, 1987). Variations however exist even within each of these zones.

Kenya's altitude varies from sea level to 5200 meters above sea level that is the summit of Mt Kenya. The Kenyan country geographically belongs to the inter-tropical convergence zone. It therefore expected to be covered with the tropical rain forest. However due to the local geography, the country is more representative of the zone of Steppe and Savannah.

Most of Kenya's land between 150 meters to 1000 meters is semi arid or completely arid due to water shortage. Due to rainfall variation and unreliability, over 80 per cent of the total area is unsuitable for agricultural activities.

Administrative set up

Administratively, Kenya is divided into eight provinces. These are the coast province- inhabited mostly by the Mijikenda/Swahili, eastern province- inhabited mostly by the Kamba, Meru/Embu. On the northern side we have Northeastern province inhabited by the Orma and Kenyan Somali. There is then the Rift Valley mostly inhabited by the Kalenjins, Nyanza province mainly a home to the Luos and Kisii. There is then the western province occupied mostly by the Luhya and finally Central province basically inhabited by the Kikuyu.

Population profile

The population of Kenya is still one of the fastest growing in the world even though the fertility rates have dropped considerably since the 1980's. Kenya's population increased from 5.4 million in 1948 to 16.2 in 1979 and to 23.2 million in 1989 (CBS 1994). Currently Kenya's population stands at 30.3 million.

Kenya's population growth rate dropped from 3.8 per cent per annum in 1979 to about 3.0 per cent per annum in 1998. Currently Kenya's population growth rate is about 2.1 per cent per annum. Even with the declining fertility rates and increase in mortality that

has been associated with the HIV/AIDS pandemic, the size of the countries population is projected to exceed 32.4 million by the year 2010. As a result of high fertility and declining mortality in the recent past, a young population characterizes Kenya. Almost 50 per cent of Kenya's population is less than 15 years of age (CBS 1998).

Urbanization

The rate of urbanization in Kenya is still low as most of its population still lives in the rural areas. By 1990, only 18 per cent of the country's population lived in urban areas mostly in the cities of Nairobi and Mombasa (CBS 1994). Urbanization in Kenya is however on the increase with small urban centers having a faster growth than major urban centers. Most of these small urban centers are along highways, which serve as resting points for long distance truck drivers and links to the major cities (Sam O., 1996).

The prime push factor for Kenyan families migrating to urban areas is the hope of finding good living in the urban areas (Ocholla-Ayayo, 2001). This has however not happened in most of the times as majority of the people who migrate to urban areas live in abject poverty contributing to the ever increasing problem of slum creation accelerating urban poverty and increasing crime rates (Ocholla-Ayayo (2000). The urbanization process in Kenya and its raising challenges evidenced by the increase in urban poverty proves the inability of the urban dwellers to provide for the necessary services required for urban families.

In spite of the challenges that come with urbanization, at present, urbanized areas are increasing at the rate of 7 per cent per annum. This has the implications that the urban population may double in less than 10 years. The existing urban challenges may have far reaching effects on the population structure of the urban populations. With the rising challenges people may actually be motivated to desire less children. This is because unwanted children and orphans all of whom need special care present problems beyond the family's abilities to cope (Ocholla-Ayayo 2001).

Socially, the rapid growth rate in urban centers has important implications for the provision of basic services such as water, sewerage, housing facilities and schools. Even with the first growth rate of urban centers in Kenya, majority of Kenyan's- about 80 per cent- still live in the rural areas where the family experiences great stress and strain in this changing situation.

Economic activities

Kenya's economic backbone is the agricultural sector. Close to 30 percent of Kenya's GNP and two thirds of all exports come from the agricultural sector. In a nutshell Kenya's economy is agriculture based and is being supported by farmers most of whom live in the rural areas. About 26 per cent of the gross domestic product (GDP) is accounted for by the agricultural sector while manufacturing accounts for only 14 per cent (CBS, 1998). The majority of the African families continue to be oriented to agrarian lifestyles and depend on the family labour force for subsistence food and cash crops (Ocholla-Ayayo. 2001).

Within most Kenyan families especially in the rural areas, as in the past, women and children are the most important source of farm labour as well as domestic labour. For this reason thus, large families are still desired by both men and women and polygyny is seen as means of increasing family size and providing additional free labour (See Ocholla-Ayayo, 2000, 2001; Jansen, 1984). The situation may be different in the urban areas where the economy is geared towards manufacturing with wage employment. Urban African families thus tend to experience children as a burden unlike the rural children who are still highly valued and serve important economic roles in the family (Oppong, 1980).

Health and nutrition

The health status of Kenyans can be said to be deteriorating. The average life expectancy of a Kenyan is 47 years down from 54 years in 1998. Kenyan infant mortality rate is estimated to be 74 per 1000 live births up from 62 per 1000 in 1997. This has the implication that about one out of every three children die before the age of five and about a half of the children die before age five. A rise in infant mortality may have an effect on desired family size. The slight increase in infant mortality noted above may be explained by the general degradation of the living conditions due to poor nutrition, deteriorating health care systems and the impact of the dreaded HIV/AIDS.

The shift by many farmers in Kenya from food-crop production to cash crop production is a lead cause of food shortages to the Kenyan families. Death rates are thus high as a consequence of poor diets, poor sanitation, the absence of effective preventive and curative medical practices and the fast spread of HIV/AIDS (Ocholla-Ayayo, 2001).

1.1.1 Problem statement

Many studies in Kenya have focussed their attention largely on women's attitudes and behavior in matters concerning reproduction (See Durell A.. 1990; Nkanata.F. 1990; Jensen and Magdallen.N.J 1989; Sempembwa, 1981; Gosana, 1985). Men in Kenya have been sidelined yet in most times the men's opportunities for reneging on responsibilities to offspring are usually greater than those of women.

The existing belief systems in Kenya as well as well as the value systems and ethical prescriptions have generated customs and traditions, habits and prejudices, loyalties and allegiances as well as practices that have strong propensity to resist change. The man in most Kenyan communities is seen as the decision-maker, the breadwinner and the flag bearer of his lineage.

Although men and women are biological partners on the reproductive process, greater emphasis has been placed on the women. This preoccupation with women has tended to minimize the reproductive motivation of the men, thereby ignoring the social significance of the people who are dominant not only within the family, but also at community level.

Compelling sociological and institutional factors exist favoring Kenya men in matters affecting family life. As Ocholla-Ayayo and Ogutu (1986) argued that belief systems and ethical issues once established by a population do generate customs which guide that population for a long time and usually resist change or do change very slowly. Such thus

is the belief for mans dominance in the family that all important decisions regarding family matters are a man's responsibility. The greater emphases that have previously been placed on the woman regarding family size preferences fail to capture the importance of the role a man plays in the family regarding family size preference. In addition, the economic gap between men and women currently in existence in Kenya makes the woman socially and economically dependent on their husbands hence this gives the men a great influence in the household, a system that is strengthened by a patrilineally organized family structure.

As described above, while many studies have not focussed on men's fertility preference, ii is evident that in Kenya men's fertility preferences are usually higher than that of women. The current average family size desired by men in Kenya is 4.0 children while that desired by women is 3.8 children (NCPD 1998).

The reproductive intentions and expectations of Kenyan men, therefore, deserve more attention than they have received in previous studies. Ignoring men in fertility research undermines the efforts both to change their attitudes on population matters and not motivate them, and through them, their wives, towards family planning.

The problem is further compounded by the fact that even among the men themselves, there exist variations, which are related to their socio-economic status, cultural affiliation and demographic status. It is evident that there exist disparities between urban and rural men in terms of education, employment and their level of cultural affinity. In this case

many urban dwellers have attained higher levels of education compared to their rural counterparts. It is also evident that Kenya's economic activities are greatly varied between the urban and rural areas. Many of the men in the rural areas are engaged in Agro- based activities while a small percentage are engaged in formal employment either in the civil service or the industrial sector-which comprises less than 20 per cent of the entire country's job opportunities. Such disparities therefore may have far reaching effects on the fertility behavior of the people.

Culturally Kenya comprises of different ethnic groups each with its own distinctive culture. Different ethnic groups have different attitudes towards the number of children desired hence a look at the different cultures in Kenya in terms of ethnicity, region of residence and even religion is worthy investigating as regards fertility desires.

Existing demographic variations among the currently married men in Kenya may also form an important aspect, which influences fertility preferences. Men in different cohorts may have different underlying factors that could influence the number of children they desire. The current age and or the age at first marriage may have an effect on desired family sizes.

The main issues in the problem statement can be outlined as follows:

- a) That men in Kenya vary socio-economically where both education and employment are greatly varied between certain categories of people as explained above and this may have far reaching effects on the fertility behaviors of these people.
- b) That the great cultural diversities including religion, region of residence and type of marriage among Kenyan ethnic groups gives each group a distinctive value system different from other groups which may affect the desired family size of particular groups.
- c) That some demographic aspects such as current age and age at first marriage are not constant in Kenya and that such difference may have an effect on the fertility behavior of particular people.

1.1.8 Research questions

The question this study seeks to address includes the following:

- a) What is the magnitude and extent to which socio-economic factors such as education: occupation and place of residence motivate family size preference among men in Kenya?
- b) What is the magnitude and extent of the effect of socio-cultural factors such as ethnicity, region of residence, type of marriage and religion on desired family size?

- c) What is the magnitude of the effect of demographic factors such as age on desired family size?

1.1.9 Objectives

Because of the importance of men in the decision making regarding family matters, this study has the general objective of analyzing family size preferences among men in Kenya considering some selected socio-economic, socio-cultural and demographic variables.

1.2.0 Specific objectives

Specifically this study seeks to explore the following:

- a) To examine the effect Socio-economic variables on desired family size among men in Kenya.
- It) To examine the effect of Socio-cultural factors on desired family size in Kenya,
- c) To examine the effect of demographic variables on desired family size in Kenya.

1.2.1 Scope and limitation

In scope the study concentrates on only married men, thus the preference for children is examined in respect to currently married men. The study cover's the entire republic since it is based on the KDHS, which was a national survey. Because this study is using secondary data, only selected socio-economic, socio-cultural and demographic factors

shall be considered. Any other explanatory factors that were not covered in the survey will not be included in this study. In this case therefore the study shall not consider any other factors apart from those covered in the survey.

The dependent variable has the category of men who did not give numeric answers to the question of how many children they would like to have in their entire lifetime. Instead their answers were such as 'it's up to God' or 'do not know'. This category contains less than 6 per cent of all the men interviewed. This category of people shall be considered with the category of men desiring 6+ children. The rationale for treating these people as desiring 6+ children is based on the assumption that they are doing nothing to limit the number of children they would have hence under normal circumstances would end up having many children.

Considering that resources are unavailable for extensive interviewing on attitudes and motivation, the present selected data set (KDHS 1998) comprise a first approximation to the "underlying" preferences or utilities to be postulated.

There is a consensus that there are varied measures of family size preference such as actual family size, desired family size, and desired number of sons among others. However this study concentrates only on desired family size and not any other related measure of fertility preference.

1.2.2 Justification of the study

A study in fertility preference is relevant to policy since, most family planning programs seek to enable individuals to implement freely their preferences and not to have unwanted births (Pullum 1988). Studies in family size preferences enable planners to assess the relative 'need' of sub-populations for family planning services.

Studies on fertility preference among men may even serve, as references for a better understanding of the unmet need for contraception among men. This study is also justified in the sense that the social and economic dependence of wives on their husbands gives men great influence in the household, a position strengthened by the patrilineally organized family structures of our society (Ocholla-Ayayo. 1992. 2000). Still because of the all-encompassing involvement of men in the family and society, they stand a better chance to provide different and more realistic views than their female counterparts about family size preference and related behavior.

Given that in most Kenyan families, men are the dominant decision-makers, and that they gain socially and economically from having large numbers of children, their reproductive preference and motivation in most times influences their wives reproductive outcome. In this case therefore an understanding of men's fertility preference is central towards understanding of the societies fertility preferences.

As with most research on fertility, studies on family size preferences have been limited largely to married women (See Jensen and Magdalen, 1989; Sempembwa, 1981). These studies are based on the assumption that women's responses represent those of married couples. Relatively, however, few data exists to test this assumption within the context of Kenya a region of strong patriarchal family organization wherein the fertility-related attitudes of women and men may differ.

This study is also important in that although women play central roles in parturition and child care, their involvement in decision making regarding their own fertility is subject to the powerful influences of husbands and senior kin (Sharon Stash, 1996). Thus where husbands' preferences are likely to prevail over their wives, they may result in lower levels of contraceptive use and higher levels of fertility than would have been predicted by observing women's attitudes alone.

An analysis of the factors that affect men's family size preference is therefore justified, as understanding men's desire for children is similar to understanding the societies fertility preference.

Lastly as Pullum (1988) said, the stated preferences are relevant to the theoretical development of the family building models under the assumption of rational behavior in which interventions are systematically formulated and then implemented.

CHAPTER TWO: LITERATURE REVIEW

2.0.0 Introduction

The African family structure shapes individual spousal perceptions of child fertility behavior" (Fapohunda and Todaro, 1988).

In the study of population studies it is well known that people formulate preferences for completed family size and these preferences begin to develop well in advance of reaching the desired family size. There are however evidence from other studies (see Bumpass; 1967, Sagi and Westoff; 1963) which indicates that some people do revise their preferences over time, nevertheless desired family size is a best known fair predictor of later fertility (Pullum 1990).

Population dynamics is a course that revolves within social interactions of the society. In the course of social and economic change, it has been noted that reproductive goals are reassessed to meet new conditions and constraints. Fertility behaviors that operated in a particular time are likely to change giving place to new behaviors more compatible with new lifestyles. The existing differences between regions of the country and across subgroups of the population are likely to provide important clues on fertility preferences among Kenyan men.

In trying to understand how fertility preferences are influenced by socio-economic, socio-cultural and demographic factors, this study shall review literature based on these selected factors.

The procedure shall be to look at what has been done outside the political boundaries of Kenya and then focus on studies that have looked into the same topic in Kenya. In this way it is possible to see how certain factors have impacted on desired family size overtime in different settings.

It should however be well noted here that fertility preferences cover a wide range of different measurement approaches and there is no standard measure or method. Among the various conceptualization of number of children include ideal family size, intended family size desired family size and expected family size (Lightburne; 1982). In practice, studies have varied widely in the question wording used to measure these concepts. However due to the nature of the KDHS data, the right wording for the concept of fertility preference is that of desired family size.

2.1.0 Socio-economic factors and fertility preference

Socio- economic characteristics of a population have for long been associated to fertility preference of a particular society by quite a number of scholars. It is within this regard that we explore the works, which support this evidence.

Studies outside Kenya

Ronald freedman et al (1980) in a family size preference study based on probability samples found out that education had a negative effect on the desired family size of Haitian men. That the more educated men were, the more they desired fewer children.

His analysis found out that educated couples had a desire for small family sizes compared to their uneducated counterparts. This had the implication that men who had higher levels of education desired smaller family sizes. Within the same study Freedman found out that urban dwellers desired fewer children than rural residents. Freedman noted that this factor was compounded by the fact that urban dwellers are likely to be relatively more educated and face greater socio-economic challenges than the rural men.

In another study done in Haiti by Freedman on family size and gender preference, it was also found that rural couples desired many children than urban couples. This had the implication that urban men desired fewer children than the rural men. It was found that the average number desired by the rural couples was 4.04 compared to the urban dwellers who desired 3.02 children. Within this study education was also found to have a negative effect on family size preference with women who had no education wanting more children than those with secondary plus levels of education who desired an average of only 2.95 children. Because it is likely that educated women will marry educated men, therefore we can conclude that educated men desired fewer children than uneducated men (Freedman et al 1980).

Janet W. Salaf (1985) in a fertility study done in Singapore came to the conclusion that the dynamics of the family relationships vary by socio-economic status of the individuals. Her conclusion was based on the realization that channels to better standards of living, level of job security and interpersonal relationships do vary by social class.

Janet pointed out that these differences in economic and social milieu are reflected in fertility behavior and in parent's rationales for bearing a certain number of children. In this study Janet found out that, intended family size in Singapore in the mid 1970's was larger for the average working class Chinese couples than for the affluent couples.

A study done in Lagos Nigeria, concerning parental benefits and fertility confirms further the association between socio-economic factors and fertility preference. In this study it was found that expected parental benefits from having many children were embraced strongly by men than women. That because of expected socio-economic gains from the children men desired many children. The locus of decision therefore as Todaro said is determined by who allocates economic resources within the family (Todaro 1988).

Elsewhere in Africa, perhaps more than their wives, African men place a higher premium on having a large number of children. They gain socially and economically from having large numbers of children, and from polygyny, because of internal family transactions with the reproductive groups constituted by each wife and her children (Ocholla-Ayayo 1990, 2001; Isiugo-Abanihe; 1994).

Case studies in Kenya

Similar studies of fertility preference have been done in Kenya and similar outcomes have been recorded. Various scholars have conducted fertility preference studies focussing on specific areas or regions (see Thomas E. Dow; 1981, Nkanata; 1990. Alila; 1990, Ayiamba; 1988).

In an attempt to analyze fertility preferences among women in an urban slum in Nairobi, Sempembwa (1981) found out that most of the women interviewed stated desired family size of 3.4 children on average. However within similar environmental conditions he found that variations did exist between those with education and those with no education. Educated women desired fewer children- 3.2- than the uneducated who desired an average number of 3.7 children. Eventhough this study focussed mainly on women, other studies have shown that women in marital unions are influenced a lot by their husbands especially when it comes to reproductive health issues (Ocholla-Ayayo; 1990). There is therefore a greater possibility that variations on family size preference among men due to the variable education also exists where educated men desire less children than the uneducated men.

Thomas E. Dow (1981) on a study done in Nairobi based on all currently married and monogamously married female residents of Shauri moyo estate aged 15-49 years found out that the desired family size expressed by the residents was averagely 5.8 children. The high average number of children desired by the women can be explained by the fact that low-income earners with low levels of education mostly occupy the area. This translates to the fact that low ranking men with low levels of education and earning low wages desire more children than educated men earning high salaries.

Ayiemba (1988) in his paper, *'The Kenyan family and attitudes towards family formation'* confirms the relationship between socioeconomic variations and fertility preference. In his study, he found out that rural residents desired an average of 6.5 children while urban residents desired an average of 4.9 children. The existing urban challenges and the exposure towards family planning knowledge render urban people incapable of desiring many children.

In his study on fertility preference in Meru district, Francis Nkanata (1990) found out that income, occupation and age at first marriage were all negatively related to desired family size. That the higher the income a person had the fewer the number of children he would desire. The type of occupation also was found to have a negative effect on desired family size. That people in professional occupations had a tendency to desire fewer children than those in less professional jobs. As for age at first marriage people who married early desired many children unlike those who married late in life.

Within the same study Francis found out that parity level of education and sex preference were all found to be positively related to desired family size. This shows some contradiction from other studies but this could have been as a result of the study population. Because Francis was studying a rural community then the real effect of education, was not felt due to the general low standards of education.

Durell D. Alila (1990) in a study on determinants of family size preferences in Mathare valley in Nairobi confirmed an existing relationship between desire for more children, region of origin, number of living children, length of residence, educational level, number of sons still alive, ethnic group, occupation and current age with desired family size. On application of multiple regression analysis, he found that desire for more children, and number of living children has a negative influence on desired family size. His study was however a small case study of a Nairobi slum with little variations as most people shared similar characteristics.

2.1.1 Socio-cultural factors and fertility preference

Socio-cultural variables have been considered for a long time as among the indicators of the socialization environment of a population (see A.B.C Ocholla Ayayo 1991. '*The spirit of a nation*'). It is therefore expected that a man's perception of family life and his reproductive choices be influenced to a greater extent by his social background. Men coming from a social background with some exposure to modern values are expected to be the ones leading the way towards changes in family and reproductive behavior (Ekouevi; 1994).

Studies outside Kenya

In an article published by Charles Wargley in the 1950's on the population dynamics of two Brazilian Indian communities, Charles wrote:

"...each culture has a population policy- on implicit or explicit set of cultural values relating to population size. The social structure of each society is closely interrelated with a specific population level...in addition to environmental, technological and other material values, the social structure act also to determine the desired family size which have an influence on the demographic trends" (Charles Wargley; 1994).

In his article thus Wargley explained how under similar sets of environmental constraints, the Tapirape Indians of Brazil value small families and actually limit births to only three children per family. On the other hand the Tenetchara take pride in many children and impose few restrictions on the number of births. This analysis by Wargley shows that the distinctiveness of the two approaches can only be explained in terms of the value systems of each group and the way family size is related to other aspects of their social structure.

Along the same line of value systems, Jane L. Collins (1983) in a study of fertility in Peru found out that the fertility preference of Aymara community was 5 children. The desire for high number of children among the Aymara. she concluded was related to the types of work and tasks that could be performed by children of different ages. Jane found out that in this community offspring's are expected to reside with their parents even after reaching adulthood so as to provide for their aged parents.

As agriculturists, the Aymara rely on family labour for their agricultural productivity hence the desire to have many children.

Case studies in Kenya

Looking at studies done in Kenya similar outcomes have been found.

Thomas E. Dow and Linda H. Werner (1983) in their analysis of prospects for fertility decline in rural Kenya came up with the realization that, majority of rural men and women in Kenya -about 74%- expected to receive regular financial and labour support from their children when they grow old.

In this study it was found that majority of the respondents expected substantial or complete future support from their children making rural men to desire more children. In this study they established that transitional men who began embracing modern values desired fewer children and had fewer children.

The underlying explanation as put by Thomas and Werner was that transitional men contained a large element of uncertainty regarding the future support hence speculated that this uncertainty encourages somewhat lower levels of desired family size (Thomas and Werner; 1983). One more cultural dimension they found to have a positive effect on desired family size was bride price.

In this study about 70.5 % of the fathers indicated they expected bride price as a factor that contributes to high fertility preferences among the traditional men.

They tend to desire substantially more daughters than fathers less certain to receive bride price (Thomas; 1983).

Thomas and Werner concluded that the expectation of a bride price is an important link in the chain of lineal wealth flows. It sustains and encourages high fertility preferences and actual family sizes.

In a study on fertility preference in Meru district conducted by Francis Nkanata. he found that the culture of the men to prefer a particular sex of children- the male sex- had a positive effect on desired family size (Nkanata; 1990)

On another study done by Durell Alila on family size preference in Mathare Valley in Nairobi, he came up with the finding that people whose origin are areas of high fertility maintained their high fertility characteristics (1990). This has the indication that people in different locations have distinctive characteristics, which influence their desired family sizes.

Aviamba (1988) cited ethnicity as one of the factors, which explained, varied family size preferences. He found out that, the Kalenjins and the Mijikendas as tribes had a high preference for children-about 7- compared to the other ethnic groups of Kenya. The Luo and Kamba ethnic groups desired an average of 5.8 and 5.7 children respectively.

2.1.2 Demographic factors and fertility preference

It has been hypothesized that men belonging to the same cohort are likely to be influenced by similar events throughout their lifetime (Koffi; 1994). The argument is that men at a particular age may adopt behaviors and attitudes that are independent of their social background and socio-economic status.

Studies outside Kenya

Ronald Freedman et al (1980) in a family size and gender preference study done in Haiti came up with the finding that Haitian families desired an average total family size of 3.58 children. The study found a direct correlation between age and number of children desired. Younger women as well as younger men desired fewer children. There was thus a tendency for young men and women to delay marriage and high use of modern contraceptives.

Vaessen et al (1983) came up with the findings that family size preferences could take many forms within the context of a particular number of children desired. They argued that parents might desire at least one child of each sex, a minimum of children of a particular sex or sons and daughters. In their argument they postulated that couples might actually continue childbearing beyond their desired family size in order to achieve a favorable number or distribution of sons and daughters.

Case studies in Kenya

On a study done by Alila (1990) in Matbare Valley, a number of factors including number of sons alive and current age were found to be related to desired family size. Results of the multiple regression analysis showed that number of sons had a negative effect on desired family size.

On a different study based on a rural population, Nkanata investigated fertility preference in a rural district -Meru. The results of his study confirmed that age at first marriage was negatively related to desired family size. That, people who married at a latter age desired fewer children.

2.1.3 Theory and conceptual overview

Theories of family formation and reproductive health behavior have existed since the times of Thomas Robert Malthus. Different scholars have however tried to postulate theories based on either social or economic consideration in trying to explain the reproductive behaviors of different populations.

(Goode (1963) studied ethnographic and sociological materials from six areas - the West, Arabic Islam. Sub-Saharan Africa. India, China and Japan. He suggested that as societies move from a traditional economy to a modern one. marital practices would converge to western nuclear family characteristics.

Although Goode recognized the variety of marital practices and the norms attached to them in all regions he considered, he concluded that the social forces of industrialization and urbanization would eventually push every society towards the adoption of the nuclear family type. In other words, as argued by Ekouevi. Goode's argument is that modernization will create a social and economic environment similar to that observed in the western societies, which encourage individuals in other societies to adopt western family values and behavior (Ekouevi; 1994).

Economists have also had great influence on family formation and reproductive behavior theory. They simply have modeled family and reproductive behavior following economic laws of supply and demand (see Becker, 1960; Becker and Lewis, 1973; Easterlin, 1983). Their basic assumption is that that modernization will occur at the individual level, and that, individuals are rational decision-makers that take into account constraints imposed by income, price and time.

Becker (1960) argued that a household's desire for children is similar to the desire for other commodities. It should thus follow economic laws of demand. The taste for children, in this instance is conceptualized, as competing with other commodities desired by the household. That with modernization the aspiration for consumer durable goods will increase and the taste for children will decrease. Emphasis will be more on the quality of children than on their quantity.

This perspective have however been challenged because it fails to account for social motivations underlying family and reproductive behavior (John C. Caldwell, 1982). Caldwell suggested that the economic modernization argument was too simplistic. Noting that individuals were economically rational in both traditional and modern societies.

Pullum (1988) came up with a theoretical formulation that related fertility preference with a number of independent variables. Pullum regarded the response to the survey question of how many children one wanted to have which concern numbers of births as indicators of an underlying continuous variable at the level of the individual.

In Pullum's formulation, an assumption is made that every person at every time has an entire preference function which describes the relative utility of each family size that one could possibly have. Pullum stated that, that function together with one's current family size, will generate one's statements about desire for children. If one attaches a higher utility to a greater family size than the one he/she currently occupies, then that person will state a preference for more children.

Pullum addressed in his model, that in a general formulation of the process, the preference function would be allowed to change as a person's circumstances changed. Pullum further argues that the best of these circumstances would be actual family size, which provides the best reference against which the utility of alternatives can be calculated.

In Pullum's model. U_i is treated as the utility the person attaches to completed family size. It is assumed that U_i has a systematic component which is a function of measured variables, such as family size, education among others.

U_i is completely described as:

$$U_i = f_i(X_1, X_2, \dots, X_k, c) \text{ with some functional form } f_i.$$

The residual c itself as Pullum described it includes two components. First, as the unmeasured portion of the systematic variation, for example, the size of the person's family of origin, his personality characteristics and community variables, which may have explanatory power but are not available. Secondly, the error term can reflect the role of influences which are, for practical purposes, genuinely random- which are short term, cannot be anticipated and individually have only small impact.

In a more simplified form, the model can be presented as follows:

$$U_i = f_i(X_1, X_2, X_3, \dots, X_k)$$

Where:

U_i = the utility which a man attaches to completed family size mostly referred to as family size preference.

f_i = functional form.

$X_1 \dots X_k$ = measured variables explaining the variations in a family size preference.

This model is simplified here and will be presented as follows: That the family size preference is a function of the independent effects of the socio-economic, cultural and demographic factors.

That is

$$F_i = f_i(S.E, C', D)$$

Where

F_i = the desired family size.

f_i = functional form.

S.E = Socio-economic factors.

C = cultural factors.

D = demographic factors.

2.1.4 Summary of literature

The general notion from fertility studies as examined from the different literature is that fertility behavior is preceded by the formulation and implementation- even if inefficiently- of fertility preference.

From the above literature it is also evident that people's fertility behavior is not only biologically regulated but also influenced and modified by other external factors. One major thing however is that factors affecting people's fertility behavior are not constant and do change with time as well as the current prevailing conditions at a particular place, this fact makes people's fertility behavior vary from one condition to another and also do change with time.

There is therefore lack of clear-cut conditions and factors that have been identified both by theory or previous studies that can be said to explain the fertility behavior of people. While some theories have focused more on economic conditions, others have put more importance on cultural factors and conditions.

The lack of universally accepted conditions that operate uniformly all over the universe that could serve to explain the fertility behavior of all the people means that at any one time a study of fertility preference in any given setting is viable.

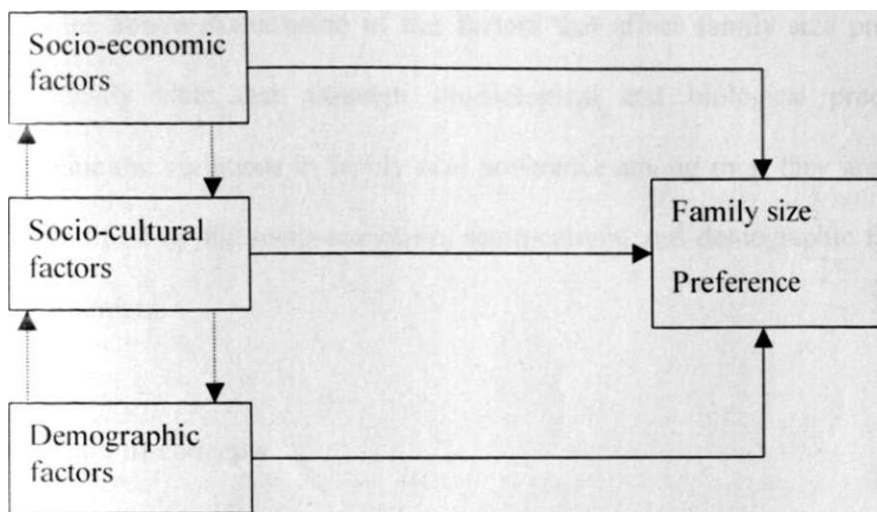
Pullums theoretical formulation is kind of an open model and takes into account all the factors that may serve to explain the fertility behavior of some people at a particular time. For this reason Pullums theoretical formulation shall be adopted for this study.

2.1.5 Theoretical framework

As it has been mentioned above Pullums theoretical formulation shall here be adopted. Pullums propositions are that fertility behavior is affected by both socio-economic, socio-cultural and demographic factors. This framework therefore allows us to operationalize our concepts as stated in the problem statement.

Below is a schematic presentation of Pullum's framework, which is hereby adopted for analysis. The socio-economic factors, socio-cultural factors and the demographic factors are here treated as the explanatory factors while family size preference is the dependent factor we are seeking to explain.

1.1 Conceptual model of desired family size



Source: adopted from Pullum 1980.

* f e J i . ' - y i : • \ , ,
iWHWl-P⁸^

Theoretical hypotheses

following the above conceptual model the socio-economic, socio-cultural and demographic factors form the explanatory factors hence the conceptual hypotheses states

that:

- 1) Socio-economic factors have a negative effect on number of children preferred.
- 2) Socio-cultural factors can have either negative or positive effect on number of children preferred.
- 3) Demographic factors have a negative effect on number of children preferred.

Theoretical statement

In the above examination of the factors that affect family size preference we can theoretically state that although physiological and biological processes primarily determine the variations in family size preference among men, they are always affected and modified by the socio-economic, socio-cultural and demographic factors prevailing at the moment.

Definition of concepts

a) Family size preference.

This is the number of living children that a man desires to have in his entire life,

h) Socio- economic factors.

Socio-economic factors here relate to the man's attributes as regards to his level of education, occupation and place of residence.

c) Socio-cultural factors.

These factors shall here be used to refer to the man's attributes, which regards his ethnicity, type of marriage and region of residence.

(i) nomographic factor

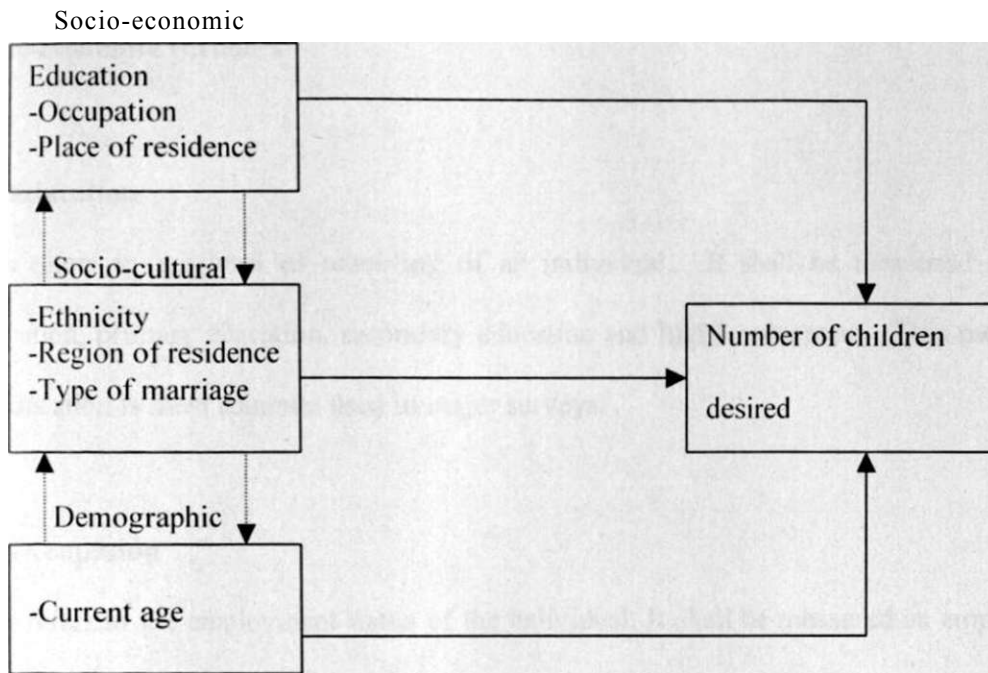
The Demographic factor here is considered to be the man's characteristics regarding his current age.

2.1.6 Operational framework

To operationalise the above framework, selected socio—economic, socio-cultural and demographic variables shall be used as explanatory variables for family size preference. The selected variables are occupation, education and place of residence as socio-economic variables. Ethnicity, region of residence and type of marriage as socio-cultural variables. And lastly current age as the demographic variable.

These variables are operationalized as shown on the next page in a schematic diagram.

Fig 2 Operational model of desired family size



Source: adopted and modified from pullum 1980.

Definition of variables

Dependent variable

* Desired number of children.

This is the actual number of children a man prefers to have in his life.

Independent variables

Socio-economic variables

*** Education**

This refers to the level of schooling of an individual. It shall be measured as no education, primary education, secondary education and higher education. This measure of education is most common used in major surveys.

*** Occupation**

This refers to the employment status of the individual. It shall be measured as employed self employed and formal employed.

*** Place of residence**

This variable refers to the place where an individual was residing at the time of survey. This variable shall be categorized as rural or urban residence.

Socio-cultural variables

*** Ethnicity**

This here refers to the tribe of an individual and shall be categorized as Luo, Kikuyu, Luyha. Kamba. Kisii, Kalenjin, Mijikenda/Swahili and other.

*** Region of residence**

This refers to the location where one lives. Region of residence shall be categorized as Nairobi, Central, Eastern Coast, Western, Nyanza, and Rift-Valley.

*** Type of marriage**

This refers to the type of marital arrangement a man has. Type of marriage shall be categorized as monogamous or polygamous.

Demographic variable

*** Current age**

Current age shall be categorized in five-year age groups.

2.1.7 Operational hypotheses

I. A man's level of education negatively influences the desired family size.

Professional occupation negatively influences desired family size.

Urban place of residence has a negative effect on desired family size.

4. A man's ethnic background has either positive or negative effect on desired family size.

5. A man's region of residence has either positive or negative effect on desired family size.

6. Monogamy has a negative effect desired family size.

7. Age of a man positively influences the desired family size.

CHAPTER THREE: DATA AND METHODOLOGY

3.0.0 The data set

This study utilizes data from the Kenya Demographic and Health Survey (KDHS) of 1998. The KDHS was conducted by the National Council for Population and Development (NCPD) together with the Central Bureau of Statistics (CBS) within the framework of the Demographic health Survey (DHS) program of the Institute for Resource Development International.

The KDHS sample was national in coverage with the exclusion of north eastern province and four northern districts which together account for about 5 percent of the population. Complete interviews were obtained for 7,881 women aged 15-49 and 3,407 men aged 15-54 years.

The principal aim of the 1998 KDHS was an up to date information on fertility and childhood mortality levels, nuptiality, fertility preferences, awareness and use of family planning methods, use of maternal and child health services and knowledge and behaviors related to HIV/AIDS and other sexually transmitted diseases.

i.1.O Data analysis

The main preoccupation of this study from the methodological standpoint is to show how the socio-economic, cultural and demographic factors affect family and reproductive behavior. Analysis is mainly based on the KDHS data, and the main variables used in the analysis are as explained in chapter two. They include; education, occupation and place of residence as socio-economic variables. Region of residence, ethnicity and type of marriage as cultural variables. Lastly, we have current age as the demographic variable.

3.1.1 Statistical analysis

As a general strategy for the analysis, bivariate analyses are conducted to study simple associations between independent and dependent variables. Since simple bivariate associations are affected by the effect of other variables, it is necessary to investigate further bivariate relationships through a multivariate framework. The objective of the multivariate analysis is to sort out the effect of each independent variable on the dependent variable, holding constant other variables that might influence the relationship.

Simple cross-tabulations shall be used to study the associations between the independent socio-economic, cultural and demographic variables and the dependent variable desired family size. The χ^2 test shall be used together with the cross-tabulations to test the significance of these associations. That is whether the selected independent variables affect the dependent variable significantly. In order to arrive at this, the frequencies or

the observed fertility will be tested to find out whether or not they differ significantly from the expected frequencies on the basis of some stated null hypothesis.

The χ^2 value is arrived at using the following formula:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

O = Observed frequencies

E = Expected frequencies

The calculated value of the χ^2 shall be compared with the table χ^2 value with given degrees of freedom at a specified level of significance in order to accept or reject the null hypothesis. The null hypothesis (H_0) is rejected only when the calculated χ^2 value is equal to or greater than the tabulated χ^2 value at the specified level of significance using the stated degrees of freedom (For more details on derivation of χ^2 see Blalock, 1960).

In the analysis most of the independent variables are dummy variables and the dependent variable is a continuous variable. Usually, the ordinary least squares method is used in such circumstances to study the relationship between the independent variables and the dependent variable in a multiple regression analysis. The multiple regression analysis shall be used to predict the effect of each independent variable at a time on the desired family size. This shall enable us to distinguish the relative effect of each independent variable in accounting for the variations in desired family size.

The standard multiple regression model is given as:

$$Y = P_0 + P_1X_1 + \dots + P_kX_k + e$$

Where:

Y = the dependent variable.

X₁/...X_k = the independent variables mostly referred to as explanatory variables.

e = the error term.

P_i's = coefficients of net regression.

However because the standard errors are assumed to be normally distributed, then we can ignore the error term hence our standard multiple regression model will be represented as:

$$Y = (i_0 + i_1X_1 + \dots + i_kX_k)$$

The regression is said to be net in the sense that the regression of the dependent variable on the particular independent variable is measured while holding the values of the other independent variables constant. The regression coefficients also tell us the number of units of change in Y variable, which will accompany a change of one unit in the X variable.

The dependent variable as has been said earlier is the desired family size. While it is true in real life that desired family size is affected by a variety of variables at the same time rather than by just one variable at a time, this study thus uses the least squares method to control for this effect. The least squares method is deemed appropriate due to its strength to determine the variations in the dependent variable explained by every independent variable while holding other independent variables constant.

The **proportion of the variability in the dependent variable that is explained by the independent variables is usually shown by the value R^2 in the regression results.**

CHAPTER FOUR: CHARACTERISTIC DISTRIBUTION OF THE POPULATION

4.0.0 Introduction

This chapter looks at the characteristics of the study population according to the study variables. The main assumption in this study is that Fertility preference among currently married men in Kenya is to a great extent related to the socio-economic, socio-cultural and demographic factors as outlined in the previous chapters. Although other factors such as personal psychological factors may effect desired family size, this study only examines specific socio-economic, cultural and demographic factors. The number of men in the KDHS sample comprised 2336 cases however married men formed 1424, which is noing to form our study sample.

In this section a presentation of the percentage distribution of the population according to the different characteristics shall be presented. Results of cross tabulations between the desired family size and the other selected independent variables shall also be presented to show the relationship between the dependent variable and each of the independent variables.

The variables to be considered shall include desired family size as the dependent variable. (urrent age as the demographic variable and ethnicity, region of residence and type of marriage a cultural variables. Religion may be looked at just as a control variable.

Lastly education, occupation and place of residence shall be treated as socio-economic variables.

4.1.0 Section 1:Frequency distributions

4.1.1 Frequency distribution of currently married men by socio-economic characteristics

This section provides the frequency distributions of currently married men according to their socio-economic characteristics.

Table 1.0 the percentage distribution of respondents according to education.

	frequency	Valid per cent (%)	Lummulative per cent (%)
No Education	152	10.7	10.7
Pri. Education	793	55.7	66.4
Sec. Education	452	31.7	98.1
Higher	27	1.9	100.0
Total	1411	100.0	

The table above shows the distribution of respondents according to education. The table shows that majority of the currently married men had primary education.

This group comprised of 55.7 percent of the entire population of married men. 31.7 per cent of the married men had secondary education while 10.7 per cent of the married men had no education at all. The least group was the men with higher education. Among the currently married men, only 1.9 per cent had higher education by the time of the survey. The largest group of currently married men in Kenya therefore had only primary education during the time of the survey.

Table 1.1 **the percentage distribution of the currently married men according to occupation.**

	Frequency	Valid per cent (%)	Cummulative per cent (%)
Not working	00.0	00.0	00.0
Sales/services	1040.0	73.7	73.7
Skilled manual	227.0	16.1	89.8
Unskilled manual	144.0	10.2	100.0
Total	1411.0	100.0	

From the above table, none of the currently married men had no job. 73.7 per cent of the married men were in the sales and service industry while 16.1 per cent were skilled manual employees. The unskilled manual workers comprised of only 10.2 per cent of the currently married men. In general, all currently married men in Kenya were working either in the professional sales and service, or as manual workers-both skilled and unskilled.

Table 1.2 percentage distribution of respondents according to place of residence.

	Frequency	Valid per cent (%)	Cummulative Per cent (%)
Urban	308	21.6	21.6
Rural	1116	78.4	100.0
Total	1424	100.0	

The table below shows the percentage distribution of married men according to their place of residence. From the table it is evident that many married men reside in the rural areas where 78.4 per cent of the entire married population was found to be living in the rural areas. This leaves only 21.6 per cent of the married men population staying in the urban areas. This shows that, majority of married Kenyan men still live in the rural areas.

4.1.2 Frequency distribution of currently married men according to socio-cultural characteristics

Table 1.3 Percentage distribution of currently married men according to region of residence.

	Frequency	Valid per cent (%)	Cumulative Per cent (%)
Nairobi	119	8.4	8.4
Central	173	12.1	20.5
Coast	233	16.4	36.9
Eastern	221	15.5	52.4
Nyanza	220	15.4	67.8
R.Valley	433	30.4	98.2
Western	25	1.8	100.0
Total	1424	100.0	

From the frequency distribution table shown above. Rift Valley has the majority of currently married men amounting to 30.4 per cent. Coast has 16.4 per cent of the currently married men. Eastern and Nyanza have both 15.5 and 15.4 per cent respectively of the currently married men. Western has the least number of married men with only 1.8 per cent while Nairobi has 8.4 per cent of the currently married men population.

Table 1.5 percentage distribution of currently married men according to ethnicity.

	Frequency	Valid per cent (%)	Cumulative Per cent (%)
Catholic	530	37.2	37.2
Protestant/orth.	741	52.1	89.3
Muslim	56	3.9	93.3
No religieion	75	5.3	98.5
Other	21	1.5	100.0
Total	1411	100.0	

The table above shows that majority of the currently married men were protestant Christians who accounted for 52.1 per cent of the currently married men. 37.2 per cent of the married men in Kenya were Catholics while only 3.9 per cent of the currently married men were in Kenya were Muslims. 5.3 per cent of the married men population belonged to the No religion category of people while 1.5 per cent belonged to other religion.

Generally the married men population comprised mainly of Christians- both Catholics and protestants- such that 89.3 per cent of the married population are Christians. For a country dominated by Christians like Kenya the above results are quite in order.

Fable 1.5 percentage distribution of currently married men according to ethnicity.

	Frequency	Valid per cent (%)	Cumulative Per cent (%)
Kalenjin	249	17.5	17.5
Kamba	154	10.8	28.3
Kikuyu	276	19.4	47.7
Kisii	112	7.9	55.5
Luhya	125	8.8	64.3
Luo	189	13.3	77.6
Meru/Embu	127	8.9	86.5
Mijikenda/Swahil	104	7.3	93.8
Somali	2	0.1	94.0
Taita/Taveta	40	2.8	96.8
Other	46	3.2	100.0
Total	1424	100.0	

from the above table, majority of the married men belonged to the Kikuyu ethnic group with 19.4 per cent of the currently married men interviewed. 17.5 per cent of the currently married men in Kenya were Kalenjins while Kambas formed 10.8 per cent of the currently married men interviewed. The Luos Comprised 13.3 per cent of the currently married men interviewed and the Luhyas had 8.8 per cent. The Kisii, Meru/Embu, Mijikenda/Swahili. Somali. Taita/Taveta and Other ethnic groups had less than 8.0 percent of the currently married men interviewed.

Table 1.5 percentage distribution of currently married men according to ethnicity.

marriage

	Frequency	Valid per cent (%)	Cumulative Per cent (%)
Monogamous	1275	89.6	89.6
Polygamous	148	10.4	100.0
Total	1423	100.0	

From the above table 89.6 per cent of the currently married men interviewed were in a monogamous type of marriage. Only 10.4 per cent of the currently married men had either two or more than two wives.

4.1.2 Frequency distribution of currently married men according to socio-cultural characteristics

Table 1.7 Frequency distribution of currently married men according to age.

Age	Frequency	Valid per cent (%)	Cumulative Per cent (%)
20-24	86	6.0	6.0
25-29	213	15.0	21.0
30-34	315	22.1	43.1
35-39	243	17.1	60.2
40-44	249	17.5	77.7
45-49	176	12.4	90.0
50-54	142	10.0	100.0
Total	1424	100.0	

The table above shows that majority of the married men were in the 30-34 age group category that comprised of 22.1 per cent of the currently married men interviewed. Only 6.0 per cent of the currently married men interviewed belonged to the 20-24 years age group. The 50-54 age group comprised of only 10 per cent of the married men interviewed. Generally the concentration of currently married men was within the age bracket of between 25-49 years who accounted for 84 per cent of the total population of married men interviewed.

Table 1.5 percentage distribution of currently married men according to ethnicity.

family size.

Desired number Of children	Frequency	Valid per cent (%)	Cumulative Per cent (%)
0	6	0.4	0.4
1	21	1.5	1.9
2	214	15.0	16.9
3	271	19.0	36.0
4	448	31.5	67.4
5	92	6.5	73.9
6+	372	26.1	100.0
Total	1424	100.0	

The above table shows the distribution of currently married men according to their desired family size. 31.5 per cent of the men desired four children while only 0.4 per cent of the men interviewed desired no children. 26.1 per cent of the men desired six children and above. Generally, majority of the currently married men interviewed as shown in the table desired fewer children. The mean desired family size from the table is four (4) children.

4.1.4 Summary of frequency tables

The above tables give the distribution of the currently married men interviewed according to their socio-economic, cultural and demographic characteristics. In a broader way the above distribution show that socio-economically, majority of the married men have at least primary education and are either working as professional sales and service men or are in the skilled manual labour category. As per type of place of residence, majority of the men still live in the rural areas.

Socio culturally majority of the currently married men interviewed belong to the Kikuyu ethnic group while the Somali form the least of the ethnic groups.

Considering the region of residence, majority of the married men interviewed resides in the Rift Valley. The region with the least number of currently married men was western province seconded by Nairobi region.

In terms of religion, majority of the married men interviewed were Christians leaving Muslims with only 3.9 per cent of the entire married men interviewed. People with no religion and other religions comprised 6.8 per cent of the married men population interviewed.

Demographically majority of the currently married men interviewed were in the 30-34 age group.

As per type of marriage, almost all the currently married men interviewed were monogamous. Only a small portion of them was polygamous.

The average desired family size was four children per every married man. This is clear as one looks through the frequency distributions.

4.2.0 Section 2: Results of cross-tabulations and X² tests.

This section shall present the percentage distribution of different characteristics of currently married men by their desired family size. The significance of the association between each of the selected socio-economic, cultural and demographic variables shall be tested using the X² test.

Table 1.9 Highest level of education of respondent by desired family size.

Level of education	Desired family size			Total
	0-2	3-4	5-6+	
No Education	7 (25.2)	56 (77.1)	89 (49.7)	152 (152)
Pry. Education	119 (131.1)	397 (401.1)	275 (258.8)	791 (791)
Sec. Education	97 (74.4)	255 (227.7)	97 (146.9)	449 (449)
Higher	12 (4.3)	11 (13.2)	3 (8.5)	26 (26)
Total	235	719	464	1418

Expected frequencies in parenthesis.

Chi-square tests

	Value	df	sig.
Calculated value	96.81	6	.000
Table value	16.8	6	
Valid cases	1418		

Ho: *there is no association between education and desired family size.*

The table above presents the relationship between education and desired family size. From the table, currently married men with no education had majority of their men -89 158.6 per cent)- desiring 5-6+ children. 56 (36.8 per cent) of the men with no education desired 3-4 children while only 7 (4.6 per cent) of the men with no education desired 0-2 children.

Of the 55.7 per cent currently married men with primary education, 50.1 per cent desired 3-4 children while 34.6 per cent desired 5-6+ children. The remaining 15.3 of them desired 3-4 children.

From the above table the general trend is that as the level of education rises, majority of the men prefer small family sizes. For instance, while only 11.1 per cent of the men with higher education desired 5-6+ children, a whole 58.6 per cent of the men with no education desired 5-6+ children. On the other hand while 48.1 per cent of the men with higher education desired 0-2 children, only 4.6 per cent of the men with no education desired the same number of children.

The null hypothesis that there is no relationship between level of education and desired family size was rejected at both the 0.01 and 0.05 levels of significance. The calculated χ^2 value was 96.81 and the tabulated χ^2 value was 16.8 with 6 degrees of freedom. The alternative hypothesis that there is an association between education and desired family size was thus accepted.

Table 2.0 Occupation by desired family size

Occupation	Desired family size			Total
	0-2	3-4	5-6+	
Professional (Sales/services)	167 (169.6)	513 (526.5)	356 (339.9)	1036
Manual (Skilled manual)	63 (60.4)	201 (187.5)	105 (121.1)	369
Total	230	714	461	1405

Expected frequencies in parent iesis.

Chi-square tests

	Value	df	sig.
Calculated value	8.83	6	. 183
Table value	16.8	6	
Valid cases	1405		

11 *there is no significant association between occupation and desired family size.*

From the above table, all the currently married men were working either as professionals in the sales and services or as manual workers. Among the 73.7 per cent of the sales and service workers, 51.4 per cent of them desired an average of 3-4 children while 30.8 per cent of them desired an average of 5-6+ children. Only 17.9 per cent of the professional sales and service workers desired an average of 2 children or less.

Of the 23.3 per cent manual workers, 54.1 per cent desired an average of 3-4 children while 28.9 per cent of them desired 5-6+ children. Only 16.9 per cent of the manual

workers desired 2 or less than 2 children. Irrespective of their Occupation, majority of the men desired an average of 3-4 children.

For the test of significance, the calculated X^2 was 8.83 with 6 degrees of freedom. The corresponding tabulated X^2 value was 16.8. The null hypothesis that there is no significant association between Occupation and desired family size was accepted at the $<.05$ level of significance. Although other studies have confirmed an association between occupation and desired family size preference, the lack of a significant association in this case may be explained by the fact that all the men were kind of engaged in similar occupations lacking any significant variability.

Table 2.1 Type of place of residence by desired family size

Place of residence	Desired family size			Total
	0-2	3-4	5-6+	
Urban	75 (50.7)	160 (155.2)	71 (100.1)	306
Rural	160 (184.3)	559 (563.8)	393 (363.9)	1112
Total	235	719	464	1418

Expected frequencies in parentheses.

Chi-square tests

	Value	df	sin
Calculated value	25.8	2	.000
Table value	9.21	2	
Valid cases	1418		

The table on the previous page presents the relationship between place of residence and desired family size. From the table, majority of the currently married men live in rural areas and form 74.8 per cent of all the interviewed married men. Of the 74.8 per cent married men, 50.1 per cent desired an average of 3-4 children while 35.3 per cent desired an average of 5-6+children.

The table shows that only 21.6 per cent of the interviewed married men live in urban areas. Out of the urban dwellers, 51.9 per cent desired an average of 3-4 children while only 21.6 per cent desired an average of 5-6+ children. 25 per cent of the urban dwellers desired 0-2 children while only 14.8 per cent of the rural dwellers desired a similar number of children. From the results of the cross tabulation it is evident that rural people desire more children than their urban counterparts.

On testing the hypothesis whether there exists a significant association between place of residence and desired family size, the null hypothesis that there is no significant association between place of residence and desired family size was rejected at the 0.05 level of significance. The calculated X^2 value was 25.8 while the corresponding tabulated value was 9.21. The alternative hypothesis that there is a significant relationship between place of residence and desired family size was accepted.

Table 2.2 Region of residence

Region	Desired family size			Total
	0-2	3-4	5-6+	
Nairobi	38 (19.7)	61 (60.3)	20 (38.9)	119
Central	54 (28.5)	101 (87.2)	17 (56.3)	172
Coast	15 (38.3)	107 (117.1)	109 (75.6)	231
Eastern	54 (36.3)	132 (111.0)	33 (71.7)	219
Nyanza	24 (36.5)	95 (111.6)	101 (72.0)	220
R.Valley	41 (71.6)	211 (219.0)	180 (141.4)	432
Western	36.0	48.0	16.0	25
Total	235	719	464	1418

Expected frequencies in parenthesis

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Chi-square tests

	Value	df	sig.
Calculated value	192	12	.000
Table value	26.2	12	
Valid cases	1418		

H_0 = there is no significant association between region of residence and desired family size.

According to region of residence all the currently married men in every region desired an average of 3-4 children with only minor variations. For example Coast and Nyanza regions slightly had majority of the currently married men desiring 5-6+ children than those desiring 3-4 children although the margin is very small. Nairobi, Central, and

Western had the largest number of their men -over 30 per cent- desiring 0-2 children. Rift Valley and Coast had the least percentage of men - less than 10 per cent- desiring 0-2 children. Coast province has the least number of men desiring less than 2 children.

In testing the significance of the association between region of residence and desired family size, the calculated X^2 value was 192 while the tabulated X^2 value was 26.2. The null hypothesis that there is no significant association between region of residence and desired family size was rejected at the 0.05 level of significance. The alternative hypothesis that there is a significant association between region of residence and desired family size was thus accepted.

Table 2.0 Occupation by desired family size

Religion	Desired family size			Total
	0-2	3-4	5-6+	
Catholic	90 (87.2)	264 (267.9)	174 (172.9)	528
Protestant/orth.	129 (121.9)	385 (374.5)	224 (241.7)	738
Muslim	6 (9.2)	26 (28.4)	24 (18.3)	56
No religion	4 (12.4)	37 (38.1)	34 (24.6)	75
Other	5 (3.3)	7 (10.1)	8 (6.5)	20
Total	234	719	464	1417

Expected frequencies in parenthesis

Chi-square tests

	Value	df	sig.
Calculated value	16.8	8	.033
Table value	20.1	8	
Valid cases	1417		

H₀ = there is no significant association between religion and desired family size.

The table above shows the relationship between religion and desired family size. From the table, all religious groups including the category of no religion desired an average of 3-4 children, however the category of other religions had the men almost equally distributed with 28.9 per cent desiring 0-2 children. 33.3 per cent desiring 3-4 children and 38.0 per cent desiring 5-6+ children. The category of No religion had the highest percentage of men -45.3 per cent- desiring 5-6+ children followed by the Muslims with

42.9 per cent. The protestant had the least number of men- 30.2 per cent -desiring 5-6+ children. Looking at the two major religions- that is Christians and Muslims- Christians desired smaller family sizes compared to Muslims.

The null hypothesis to be tested was that there is no significant association between religion and desired family size. The calculated X^2 value at 8 degrees of freedom was 20.1 and the corresponding table X^2 value was 20.1 hence the null hypothesis was accepted at the 0.05 level of significance.

Table 2.4 Ethnicity by desired family size

Ethnicity	Desired family size			Total
	0-2	3-4	5-6+	
Kalenjin	13 (41.3)	118 (126.3)	118 (81.5)	249
Kamba	29 (25.4)	97 (77.6)	27 (50.1)	153
Kikuyu	78 (45.4)	160 (138.9)	36 (89.7)	274
Kisii	23 (18.6)	71 (56.8)	18 (36.6)	112
Luhya	33 (20.6)	53 (62.9)	38 (40.6)	124
Luo	12 (31.2)	71 (95.3)	105 (61.5)	188
Meru/Embu	32 (20.9)	74 (63.9)	20 (41.2)	126
Mijikenda/Swahil	6 (17.2)	34 (52.7)	64 (34.0)	104
Somali	1 (0.3)	00 (1.0)	1 (0.7)	2
Taita/Taveta	3 (6.6)	21 (20.3)	16 (13.1)	40
Other	5 (7.6)	20 (23.3)	21 (15.1)	46
Total	235	719	464	1418

Expected frequencies in parenthesis

Chi-square tests

	Value	df	sig.
Calculated value	250.8	20	. 000
Table value	37.6	20	
Valid cases	1418		

Ho there is no significant association between ethnicity ami desired family size.

In looking at ethnicity and its effects on desired family size, we see that most of the large ethnic groups- the Kikuyu, Luhya, Kisii, Embu/Meru and the Kamba- desired an average of 3-4 children with an exception of the Luo who on average desired an average of 5-6+ children. As expected majority of the minority ethnic groups in Kenya- The Mijikenda/Swahili, Kalenjin and other small ethnic groups- desired an average of 5-6+ children. The Somali are the ethnic group which had the least number of currently married men and had both extremes where half of them desired 0-2 children while the other half desired 5-6+ children.

Among the ethnic groups that desired the least number of children were the Kikuyu, Kisii, Embu/Meru and the Luhya. These ethnic groups had over 20 per cent each of the current married men desiring 0-2 children. The Kikuyu are the group that desired the least of all with 28.9 per cent of married men desiring 0-2 children. The Kalenjin were the group, which had the least number of men desiring 0-2 children.

On applying the X^2 test, the null hypothesis that there is no significant association between ethnicity and desired family size was rejected at the 0.05 level of significance. The calculated X^2 value was found to be 250.8 while the corresponding tabulated value was 37.6 at 20 degrees of freedom. The alternative hypothesis was thus accepted that there is a significant association between ethnicity and desired family size.

table 15.Type of marriage by desired family size

1 type of marriage	Desired family size			Total
	0-2	3-4	5-6+	
Monogamous	223 (210.5)	668 (643)	378 (415.5)	1269
Polygamous	12 (24.5)	50 (75)	86 (48.5)	148
Total	235	718	464	1417

Expected frequencies in parenthesis

C'hi-square tests

	Value	df	sig.
Calculated value	48.9	2	. 000
Table value	9.21	2	
Valid cases	1417		

II., *There is no significant association between type of marriage and desired family size*

From the above table, of the 89.6 per cent married monogamous men, majority of them - 2.4 per cent- desired an average of 3-4 children while 29.7 per cent of them desired 5-6+ children. Only 18 per cent of the monogamous men desired 0-2 children.

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Of the 10.4 per cent polygamous men, majority of them -58.1 per cent- desired an average of 5-6+ children while only 8.1 per cent of them desired an average of 3-4 children. From the table therefore it is evident that polygamous men tend to desire more children than monogamous men.

To test if there is a significant association between type of marriage and desired family size, the null hypothesis is stated as: there is no significant association between type of marriage and desired family size. The alternative hypothesis reads; there is a significant association between type of marriage and desired family size.

The calculated X^2 value is 48.9 at 2 degrees of freedom while the tabulated X^2 value is 9.21. The null hypothesis was thus rejected at the 0.05 level of significance and the alternative hypothesis that there is a significant association between type of marriage and desired family size was accepted.

Table 2.6 Current age of respondent by desired family size

Current age	Desired family size			Total
	0-2	3-4	5-6+	
20-24	15 (14.3)	52 (43.6)	19 (28.1)	86
25-29	40 (35.1)	117 (107.5)	55 (69.4)	212
30-34	65 (51.5)	156 (157.7)	90 (101.8)	311
35-39	31 (40.3)	122 (123.2)	90 (79.5)	243
40-44	40 (41.3)	118 (126.3)	91 (81.5)	249
45-49	28 (29.2)	81 (89.2)	67 (57.6)	176
50-54	16	73	52	141
Total	235	719	464	1418

Expected frequencies in parenthesis

Chi-square tests

	Value	df	sig.
Calculated value	24.7	12	. 016
Table value	26.2	12	
Valid cases	1418		

HO *there is no significant association between current age and desired family size.*

From the table above, all the age groups had majority of the married men desiring an average of 3-4 children with the 20-24 age group having the greatest percentage of men- >0.5 per cent- desiring the 3-4 number of children. However from the table, it can be seen that the older the men the greater the number of children they desire. For example while the 20-24 years age group had only 16.3 per cent of married men desiring 5-6+ children, the 50-54 years age group had 36.6 men desiring 5-6 children.

On average younger married men seemed to desire less children compared to older people.

In establishing whether there was a significant association between the current age and desired family size, the null hypothesis was stated as follows; that there is no significant association between current age and desired family size. The calculated X^2 value at 12 degrees of freedom was 24.7 while the tabulated X^2 value was 26.2. The null hypothesis was thus accepted at the 0.05 level of significance

Summary of cross tabulations and X² results.

The existence of significant percentages of men in Kenya who would like small families and those who would like large families points to the direction that individuals and families are not affected uniformly by social and economic changes and that their reproductive behavior are likely to follow different pathways. From the above analysis, **within** social groups where conditions and constraints encourages small families, small families are likely to become the norm and within groups where large families are still **perceived** as advantageous, high fertility norms are likely to persist. It is along this level of argument that the Luo and Mijikenda are seen to perceive large families as advantageous hence desired large families compared to the Kikuyu or the Kamba. **Looking** at place of residence, conditions and constraints in the urban areas tend to **encourage** small families hence the results of the regression analysis show that people **staying** in the urban areas are inclined to **having** smaller families unlike their rural counterparts.

Even though preferences for small and large families coexist in Kenya, on average the **tendency** towards small families and especially towards a family of four is found across all studied characteristics of Kenyan men. This finding is not unique in Kenya alone. **Studies** from other African countries that have participated in the first phase of the DHS, **show** that, the tendency to prefer a family of four children by men is also found in other **African** countries such as Ghana, Senegal, Botswana, Zimbabwe and to some extent **Burundi** (Koffi Ekouevi; 1994).

CHAPTER FIVE: DETERMINANTS OF STATED DESIRED FAMILY SIZE

5.0.0 Introduction

This section is based on the question; 'if you could choose exactly the number of children to have in your whole life, how many would that be?'

The response to this question is directed towards identifying the mode of each man's preference function at the date of the interview. This is distinctive in that it refers to hypothetical births in both the past and the future and not only the future.

It is the goal of this work to determine the socio-economic, socio-cultural and demographic factors in desired family size assuming that preferences will be or could be implemented perfectly.

The model used in this project can briefly be explained as follows:

That if we let:

- P. represents the stated personal ideal family size
- S. a set of socio-economic, predictors
- C. a set of cultural predictors and
- D. a set of demographic predictors

Then, because fertility here is assumed to almost be entirely the result of intentions and planning then the appropriate model is given as:

$$P = f(S, C, D)$$

This will necessarily omit any reference to actual family size as a predictor or control of the response variable.

In this model every man's stated fertility goal would eventually become his actual family size.

in the above model this section seeks to establish the extent to which key factors such as education and place of residence are significant independent predictors of fertility preference among currently married men in Kenya. This work seeks to identify the relative importance of each of the selected independent variables as determinants of fertility.

5.1.0 Multiple regression analysis

As explained in chapter three, the multiple regression analysis is used to determine the effect of each of the selected independent variables on the dependent variable. The 0.05 level of significance was here chosen to test the significance of the effect of the independent variables on the desired family size. The choice of the 0.05 level of significance was appropriate as it does not permit a greater error margin and also that many studies have used the same level of significance so this will make it easy to compare results with those of other studies.

All the categorical variables were included in the regression analysis by means of a set of dichotomous dummy or indicator variables. The created dummies were urban and rural for place of residence; No education. Primary education. Secondary education and Higher education for variable education level.

Other dummy variables included:-Kamba, Kikuyu, Luo, Mijikenda/Swahili, Luhya, Kalenjin and Others for variable ethnicity; Nairobi, Eastern, Western, Nyanza, Coast, Rift Valley and Central for variable region of residence; Monogamous and Polygamous for variable type of marriage; and no religion, Catholic, Protestant, Muslim, and other for variable Religion. Using the stepwise method, only the variables that were found to have significant effect on desired family size were included in the final regression model.

Certain assumptions, which are usually associated with multiple regression and could influence the significance of such a study, were looked at as follows: The existence of multicollinearity was checked by examining the standard errors. That if the standard errors are high then the independent variables could be strongly related (Gujarati 1976). However multicollinearity does not appear to be a problem in this study since all the standard errors are indeed very low.

2.1.1 Findings of the multiple regression

The multiple regression was based on a sample of 1424 currently married men. Below is presented the results of the multiple regression.

Table 2.7 Coefficients for the multiple regression.

	p	SEB	BETA	T	sigT
Highest education level					
No education	omitted				
Primary education	-.419	.111	-.144	-3.772	.0002
Secondary education	-.748	.121	-.240	-6.195	.0000
Higher education	-1.583	.264	-.149	-6.033	.0000
Place of residence					
Rural	omitted				
Urban	-.495	.102	-.141	-4.852	.0000
Ethnicity					
Kisii	omitted				
Kamba	-.420	.116	-.115	-3.631	.0003
Kikuyu	-.955	.130	-.177	-7.330	.0000
Luo	.421	.106	.099	3.954	.0001
Mijikenda/swahili	.406	.136	.073	2.983	.0029
Luhya	.042	.338	-.042	-1.590	.1121
Taita/Taveta	.001	.338	-.001	.032	.9748
Kalenjin	.059	.338	.052	1.952	.0510
Region of residence					
Nyanza	omitted				
Nairobi	-.632	.148	-.121	-4.260	.0000
Western	-1.067	.253	-.097	-4.221	.0000
Eastern	-1.105	.100	-.276	-11.020	.0000
Central	-.829	.134	-.187	-6.162	.0000
Rift valley	.013	.338	.010	.378	.7052
Coast	.010	.337	.008	.324	.7459
Type of marriage					
Polygamous	omitted				
Monogamous	-.491	.110	-.103	-4.449	.0000

Table 2.7 **continued**

Current age

<36	omitted				
>35	.069	.050	.036	1.378	.1685
Constant	5.497	.141			

The suitability of the multiple regression model was tested by the use of the F test given by

$$F = \frac{R^2 / k}{(1 - R^2) / (n - k - 1)}$$

Where:

R^2 = the multiple correlation coefficient.

N = this is the number of cases or the sample size.

K = this is the number of explanatory variables.

Based on the above formula,

$$F = 42.83$$

Sig **.0000**

$$\text{Adjusted } R^2 = .27649$$

This test is mainly useful in testing the hypothesis that non-of the explanatory variables influences the dependent variable and that the regression model is useless.

In this regression, the calculated F ratio using the above formula was $F = 42.83$ and the i:ible F value with 13 degrees of freedom was 1.75. In this case therefore the null hypothesis that non-of the explanatory variables influences the dependent variable was

rejected at the 0.05 level of significance. The regression equation was thus not useless implying that the explanatory variables influenced the desired family size a man preferred significantly. We therefore conclude that it is an appropriate model and the conclusions are statistically significant.

Looking at the adjusted R^2 the overall model explains about 28 percent of the total variations in desired family size. All the same it is a good model.

The explanatory variables were entered in the regression on a stepwise method. Out of the six explanatory variables the variable religion failed to be significant at both the 95 percent and 99percent level of significant hence was not included in the final model, the selected final explanatory variables in the regression model were place of residence, highest level of education, ethnicity, region of residence, type of marriage and current age.

5.1.2 Effects of the independent variables on desired family size

The regression coefficients due to the selected explanatory variables are interpreted below and also an attempt is made to investigate the relationship between the desired family size and the selected explanatory variables.

5.1.3 Tin* relationship between desired family size and place of residence

Looking at place of residence, urban residence has a negative effect or influence on the desired family size relative to the reference category -rural residence. Men living in urban areas thus are inclined to desire fewer children.

This may be expected due to the effects of modernization and the many challenges in urban areas relative to the rural areas.

Generally the study revealed that a negative relationship between urban place of residence and desired family size existed. The regression coefficients due to the variable place of residence in the regression model indicates that urban place of residence explains about 14 percent of the total variations in desired family size. From this analysis we conclude that the hypothesis urban place of residence has a negative effect on desired family size is confirmed.

5.1.4 The influence of education on desired family size

For level of education, primary, secondary and higher education levels had a negative effect on desired family size relative to the reference category -no education. The regression coefficients however show that higher education had greater negative effect on desired family size relative to reference category compared to primary education. Thus the desired family size is influenced by the mainly at higher levels.

general the relationship between education and desired family size from the regression results revealed that education had a negative effect the number of children a man desired. Looking at the coefficients due to the variable education in the regression model the indication is that, primary education explains about 14 percent of the variation in desired family size, secondary education explains about 24 percent of the variation in family size preference while higher education explains about 15 percent of the variations in desired family size. Secondary education thus emerges as one of the most important explanatory variable for family size preference. A conclusion is therefore made confirming the hypothesis that a man's level of education negatively influences the desire for more children.

5.1.5 The influence of ethnicity on desired family size

For ethnicity, the Kamba and Kikuyu ethnic groups had a negative effect on desired family size while the Luos and Mijikenda/Swahili had a positive effect on desired family size relative to the reference category - Kisii.

The differences in effect on desired family size among the different ethnic groups may be due to the different cultural practices unique to each ethnic group. For example the Luo and Mijikenda/Swahili encourage polygamy unlike the Kikuyu and the Kambas hence the positive effect on desired family size among the Luo and Mijikenda/Swahili.

The results of the multiple regression analysis revealed that the Kamba and Kikuyu ethnic groups showed a negative effect on desired family size while the Luo and Mijikenda Swahili had a positive effect on desired family size. A test of the coefficients

due to the variable ethnicity in the regression model indicates that the Kamba and Kikuyu ethnic groups explain about 11 and 17 percent of the variations respectively while the Luo and the Mijikenda/Swahili explained a mere 9 and 7 percent respectively of the variations in desired family size.

Other ethnic groups like the Kalenjin had a positive effect on the desired family size but failed to be significant at the 5 percent confidence level. We therefore conclude that the hypothesis ethnicity has an effect on desired family size is confirmed.

5.1.6 The influence of region of residence and desired family size

For region of residence all the regions included in the regression model showed a negative effect on desired family size relative to the reference category -Nyanza.

This study found out that, although all regions of residence showed a negative influence on desired family size, a test of coefficient due to the variable region of residence in the regression equation indicates that, Eastern region accounted for 27 percent of the variations in desired family size. Western region though had a negative effect on desired family size, it accounted for only 9.7 percent of the total variations. Nairobi region accounted for 12 percent of the variations while central accounted for 19 percent of the variations in desired family size.

>1.7 The influence of type of marriage and desired family size

For type of marriage, monogamy had a negative effect on desired family size relative to the reference category polygamy.

This may be due to the fact that people who marry more than one wife already have an intention to have more than one child for each woman has an average of one child.

The study found out that monogamous type of marriage influenced negatively the desired family size. A test of the coefficient due to the variable type of marriage in the regression indicates that monogamous type of marriage explains **10.3** percent of the variations in desired family size. From this revelation we conclude that the hypothesis that monogamous type of marriage influences desired family size negatively is confirmed.

5.1.8 The influence of current age on desired family size

The results of the regression showed that **36** years and above had a positive effect on desired family size relative to the reference category **-35** years-and below. The results thus show that older men desired more children than younger men.

A test of the coefficient due to the variable current age in the regression indicates that current age explains **3.6** per cent of the total variations in desired family size. Although these results confirm the hypothesis that age positively influences desired family size the

est for significance shows that this variable is not a significant predictor of desired family size.

5.1.9 Testing for the significance of regression coefficients due to the selected explanatory variables

The inclusion of the variable Kamba ethnic group into the regression model was found significant in explaining the desired family size. The calculated F statistic was 81.30 while the table value was 3.84 at the 0.5 level of significance. The null hypothesis that the regression coefficient due to Kamba ethnic group is zero is rejected. The alternative hypothesis, which states that the regression coefficient due to place of residence is not equal to zero, is thus accepted. With the variable Kamba the regression model explained $\hat{}$ percent of the variations.

The addition of the variable eastern region of residence into the regression model is significant in explaining the desired family size as it increased the explanatory power of the model from 5 percent to 10.5 percent of the variations in desired family size. The calculated F statistics was 84.64 while the table F value was 3.0 at the 5 percent confidence level. The alternative hypothesis that the regression coefficient due to the variable eastern region of residence is not equal to zero is accepted.

A test of the hypothesis that urban place of residence is not a significant predictor variable and should not be included in the regression model is rejected at the 5 percent confidence interval. The calculated F was equal to 76.62 while the table F was 2.60. The addition of the variable increases the explanatory power of the model from 10.5 to 13.8 percent of the variations.

The addition of the variable Kikuyu ethnic group was also found significant in explaining the desired family size. The calculated F statistics was 76.71 while the table F value was 2.37. Then, this indicates that the regression coefficient due to the variable Kikuyu ethnic group is not equal to zero. The addition of this variable increases the explanatory power of the model to 17.5 percent of the total variations in desired family size.

An addition of the variable monogamous type of marriage is found to be significant as it raises the explanatory power of the model to 19.8 percent of the total variations. The calculated F statistics was 71.13 while the table value was 2.21. The null hypothesis that the regression coefficient due to the variable urban place of residence is zero is rejected and the alternative hypothesis that the regression coefficient due to the variable urban place of residence is not equal to zero is accepted.

A test of the hypothesis that, central region of residence is not a significant predictor variable is rejected at the 95 percent significant level. The calculated F value was 65.13 while the table value was 2.10. We therefore infer that the addition of the variable central region of residence does increase the explanatory power of the model.

Addition of the variable Luhya ethnic group is also found to be significant in explaining the desired family size. The calculated F statistics was 60.41 while the table value was 2.10. The null hypothesis that the regression coefficient due to variable Luhya ethnic group is zero is rejected at the 0.05 level of significance. The explanatory power of the model is increased to 22.62 percent of the variations in desired family size.

The calculated F value due to the variable secondary education was 56.43 while the table value was 1.88. The null hypothesis was thus rejected at the 0.05 confidence level. The alternative hypothesis that the regression coefficients due to the variable secondary education are not zero is accepted. The addition of secondary education in the regression model increases the explanatory power of the model to 23.76 percent of the variations in desired family size.

The addition of the variable higher education in the regression model is found to be significant too. The calculated F statistics was 53.35 while the table F value was 1.83. The null hypothesis that the regression coefficient due to higher education level is zero is rejected at the 95 percent confidence level. The alternative hypothesis that the regression coefficient due to the variable higher education level is not zero is accepted.

The addition of the variable higher education increases the explanatory power of the model to 24.95 percent of the variations in desired family size.

Addition of the variable primary level of education in the regression is also significant. The calculated F value was 50.44 while the table value was 1.75 hence the null

hypothesis that the regression coefficients due to the variable primary education is zero is rejected at the 0.05 level of significance. Thus the alternative hypothesis that the regression coefficient due to the variable primary education is not zero is accepted. The inclusion of this variable increases the explanatory power of the model to 25.78 percent of the total variations in desired family size.

The addition of the variable Nairobi region of residence in the regression is also **significant** in explaining the desired family size. The calculated F statistics was 47.75 **while** the table value was 1.67. The null hypothesis that the regression coefficients due to **the** variable Nairobi region of residence are zero is rejected at the 0.05 confidence level. **The** inclusion of the variable increases the explanatory power of the model to 26.55 **percent** of the total variations.

A test of the hypothesis that the regression coefficients due to the variable western region of residence is zero and should therefore not be included in the regression is rejected at the 0.05 confidence interval. The calculated F value was 44.99 while the table F value was 1.57. The alternative hypothesis that the regression coefficient due to variable western region is not equal to zero is thus accepted. The inclusion of the variable increases the explanatory power of the model to 27.0 percent of the total variations in desired family size.

The inclusion of the variable Luo ethnic group in the regression is also significant in explaining desired family size. The calculated F value was 42.36 while the table value

was 1.52. The null hypothesis is thus rejected at the 0.05 confidence level and the alternative hypothesis which states that the regression coefficients due to the variable Luo ethnic group is not zero is accepted. Addition of this variable makes the regression model to explain 27.42 percent of the total variations in desired family size.

The inclusion of the variable Mijikenda/Swahili ethnic group is also found to be significant in explaining the desired family size.

The calculated F value was 39.99 while the table value was 1.46. The null hypothesis which states that the regression coefficient due to the variable Mijikenda/Swahili ethnic group is zero is rejected at the 0.05 confidence level. The alternative hypothesis that states that the regression coefficients due to the variable Mijikenda/Swahili is not zero is accepted.

The other variables which include: Luhya ethnic group, Taita/Taveta ethnic group, Kalenjin ethnic group. Rift valley region of residence, Coast region of residence, and all variables due to religion were not significant in explaining the desired family size at both the 0.05 and 0.01 Levels of significance.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.0.0 Introduction

In population studies it is well known that people formulate preferences for completed family size. These preferences begin to develop well in advance of reaching the aspired family size (Bumpass, 1967; Campbell, 1963; Sagi and Westoff, 1963). Nevertheless, desired family size is a fair predictor of later fertility (Bumpass and Westoff, 1970) and this gives us confidence that the study of family size preferences is behaviorally significant.

6.1.0 Conclusion

This study was undertaken to investigate the factors, which influence fertility preference among currently married men in Kenya.

The first underlying research problems this study sought to investigate was that men in Kenya vary socio-economically where both education, place of residence and employment status are greatly varied between certain categories of people and that this would have an effect on the fertility behaviors of the people. The objective related to this problem was to investigate the effect of socio-economic variables on desired family size among the currently married men in Kenya. This objective was to be achieved using a set of three hypotheses.

The first hypothesis was that a man's level of education negatively influences the desired family size. This hypothesis has the implication that the higher the level of education of a man the fewer the number of children he will desire. This hypothesis was confirmed by the findings of the study, as majority of the highly educated men desired fewer children.

The second hypothesis was that professional occupation negatively influences the desired family size. The findings of the study confirmed this hypothesis however occupation was found not to be a significant predictor of desired family size. This has the implication that as much as occupation negatively influences desired family size on its own it is not a strong predictor of desired family size.

The third hypothesis for this objective was that urban place of residence has a negative effect on desired family size. This hypothesis was positively confirmed by the study findings. Urban place of residence was found to have a negative effect on desired family size.

The second underlying problem was that, Kenyan men are socio-culturally diversified. That their diverse ethnic backgrounds, religion, region of residence and type of marriage give each group a distinctive value system different from other groups that may have an effect on the desired family size of a man. The related objective for this research problem was that to examine the effect of socio-cultural factors on desired family size among currently married men in Kenya. This objective was to be achieved using a set of four hypotheses.

The first hypothesis was that a man's ethnic background has either positive or negative effect on desired family size. This hypothesis was confirmed by the findings of the study where men in some ethnic groups desired more children while men in some other ethnic groups actually had the inclination to desire fewer children.

The second hypothesis to the objective was that, a man's region of residence has either positive or negative effect on the desired family size. This hypothesis was also confirmed by the findings of the study, where men residing in particular regions desired fewer children than men in some other regions.

The third hypothesis stated that, monogamy has a negative effect on the desired family size. This finding was confirmed by the study where monogamy had a negative effect on desired family size. This has the implication that monogamously married men have the inclination to desire fewer children.

The third underlying problem was that age is not constant and that people belonging to a particular cohort may have certain characteristics that may have an effect on desired family size. The related objective was to examine the effect of the demographic variable age on desired family size. This objective was to be achieved using one hypothesis.

The hypothesis was stated as; age positively influences the desired family size. This hypothesis was confirmed by the study findings where older men were found to have a positive effect on desired family size. This variable however failed to be a significant predictor of desired family size.

Conclusively therefore we can suggest that preconditions for a revision downward of traditional fertility norms are being met in Kenya. New goals and aspirations towards a more materialistic lifestyle associated with urban living, the improvement of formal education, changing marital unions and the urbanization process are some of the factors that will lead to a preference for small families

The signs of a downward inclination towards low fertility preference by men in Kenya in general at this point, is only on intentions. On implementation it would have been expected that more Kenyan men use contraceptives in order to achieve the low fertility goal. However results from other studies have shown that the use of modern contraception is not widespread yet that's why there exists an unmet need for contraception among men in Kenya.

Speculation thus points in the direction of a Kenyan low fertility preference by men based on an adaptive behavior where some traditional patterns are conserved. This type of behavior change is best described from a non-developmental perspective that allows alternative routes to social change based on specific historical and socio-cultural contexts.

6.1.1 Recommendations

This part provides a set of recommendations for both policy makers and for further research.

Recommendations for policy

Although there seem to be some signs suggesting a revision downward of high fertility preference norms, the adoption of strategies pointing towards the realization of stated intentions would provide more evidence of a real motivation to adopt small families.

This study recommends that more attention be given to coast and western regions as regards to family planning interventions. This is in line with the high preferences exhibited by men from these areas.

This study too recommends that more family planning interventions be focussed in rural areas compared to urban centers where these activities have been concentrated. The results have shown that preferences are higher in the rural areas than in the urban places.

This study also recommends that more information, education and communication materials on low fertility preference be put in place to strengthen the already existing general trend of downward inclination towards fertility preference by currently married men.

Recommendations for further research

Particular attention should be given to non-numeric responses. Moreover responses such as "up to God", "as many as possible" and "it depends" can also be approached in an anthropological perspective that will shed some light on some men unwilling to give numeric responses and also on what non-numeric responses mean in the local discourse of respondents.

This study recommends that family size preference studies on regional bases be done so as to capture the specific regional characteristics unique to different regions.

This study also sees the need to conduct fertility preference research combining both men and women such that sex becomes one of the variables under investigation.

This study also recommends that research should be carried out to ascertain the effects of environmental conditions especially community living conditions in the rural areas on desired family size.

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